UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): February 4, 2016

Amtech Systems, Inc. (Exact Name of Registrant as Specified in Charter)

Arizona (State or Other Jurisdiction of Incorporation)

000-11412 (Commission File Number)

86-0411215 (IRS Employer Identification No.)

131 S. Clark Drive, Tempe, Arizona (Address of Principal Executive Offices)

85281 (Zip Code)

Registrant's telephone number, including area code: (480) 967-5146

Not Applicable (Former Name or Former Address, if Changed Since Last Report)

| Check the appropriate box below if the | e Form 8-K filing is intended to | simultaneously satisfy the fi | iling obligations of the registra | ant under any of the foll | owing provisions <i>(see</i> |
|--|----------------------------------|-------------------------------|-----------------------------------|---------------------------|------------------------------|
| General Instruction A.2.): | _ | | | | |

| [] | Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)) |
|----|--|
| [] | Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) |
| [] | Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) |
| [] | Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) |

Item 2.02

Results of Operations and Financial Condition.

On February 4, 2016, Amtech Systems, Inc. (the "Registrant") conducted an earnings conference call relating to its first quarter results for fiscal 2016 ("2016 Results"). The earnings call was made available to the public via conference call and audio webcast through the website of the Registrant. The financial information included in the earnings call relating to the 2016 Results was also included in a press release issued by the Registrant on February 4, 2016. A copy of the press release is included as Exhibit 99.1 to this Current Report and is incorporated herein by reference.

The information contained in this Current Report, including the accompanying Exhibit 99.1 is furnished pursuant to Item 2.02 of Form 8-K and shall not be incorporated by reference into any filing of the Registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing, unless expressly incorporated by specific reference in such filing. The information in this Current Report, including the accompanying exhibit, shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended.

| Section | 0 _ | Financ | ial | Statements | and | Evhibite |
|---------|------------|--------|-----|------------|-----|------------|
| Section | y - | тшапо | паг | Statements | anu | E/XIIIDILS |

Item 9.01 Financial Statements and Exhibits.

| Exhibit No. | Description | | |
|-------------|--------------------------------------|--|--|
| 99.1 | Press Release dated February 4, 2016 | | |

SIGNATURES

| Pursuant to the requirements of the Securities Exchaduly authorized. | inge Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereum |
|--|---|
| | |
| | AMTECH SYSTEMS, INC. |
| Date: February 4, 2016 | By: /s/ Bradley C. Anderson |
| | Name: Bradley C. Anderson Title: Executive Vice President & Chief Financial Officer |

Exhibit Index

| Exhibit No. | Description |
|-------------|--------------------------------------|
| 99.1 | Press Release dated February 4, 2016 |

EXHIBIT 99.1

Amtech Reports First Quarter Fiscal 2016 Results

TEMPE, Ariz., February 4, 2016 /PRNewswire/ -- Amtech Systems, Inc. (NASDAQ: ASYS), a global supplier of production equipment and related supplies for the solar, semiconductor, and LED markets, today reported results for its first fiscal guarter ended December 31, 2015.

First Quarter Fiscal 2016 Operational and Financial Highlights

- Customer orders of \$35.6 million (solar \$23.0 million)
- Book-to-bill of 1.7 (solar 2.6)
- Net revenue of \$22.1 million (solar \$9.5 million)
- Quarter-end backlog of \$42.9 million (solar \$31.3 million)
- Net loss of \$4.0 million, or \$0.31 per share

Mr. Fokko Pentinga, Chief Executive Officer of Amtech, commented, "We had healthy order activity in the first quarter of fiscal 2016 with \$35.6 million in orders, driven primarily by our solar business. Quoting activity in solar remains strong supporting our current view that we can expect to see continued improvement in the marketplace. We expect to see most of the benefit of our recent solar orders in the second half of fiscal 2016, due to timing of shipment. As a market leader, we are focused on building upon the distinctive strengths of our solar technology solutions to support our customers' interest in advancing both their product and productivity."

Financial Results

Customer orders in the first quarter of fiscal 2016 were \$35.6 million, compared to \$18.8 million in the preceding quarter and \$30.0 million in the first quarter of fiscal 2015.

At December 31, 2015, the Company's total order backlog was \$42.9 million compared to total backlog of \$34.6 million at September 30, 2015 and \$48.3 million at December 31, 2014. Total backlog at December 31, 2015, includes \$31.3 million in solar orders and deferred revenue compared to solar backlog of \$22.9 million at September 30, 2015 and solar backlog of \$40.7 million at December 31, 2014. Backlog includes deferred revenue and customer orders that are expected to ship within the next 12 months.

Net revenue for the first quarter of fiscal 2016 was \$22.1 million, a decrease of 22% compared to \$28.2 million in the preceding quarter, and an increase of 78% compared to \$12.4 million in the first quarter of fiscal 2015. The sequential decrease is due primarily to lower volume in the solar segment. The increase from the first quarter of fiscal 2015 is due to increased demand in the solar segment and the inclusion of BTU revenues, partially offset by a decrease in the polishing segment due primarily to the strength of the US dollar versus currencies in the markets served.

Gross margin in the first quarter of fiscal 2016 was 27%, compared to 23% in the previous quarter and 28% in the first quarter of fiscal 2015. The higher margins sequentially resulted primarily from an improvement in our semiconductor product mix.

Selling, general and administrative (SG&A) expenses in the first quarter of fiscal 2016 were \$7.6 million compared to \$9.1 million in the preceding quarter and \$6.4 million in the first quarter of fiscal 2015. Sequentially, the decrease results primarily from lower shipping and commission expense on lower sales volume. Compared to the same quarter in fiscal 2015, the increase results primarily from inclusion of BTU's SG&A since January 30, 2015, and higher selling expenses related to higher revenues. SG&A expenses include \$0.3 million, \$0.3 million and \$0.2 million of stock-based compensation expense in the first quarter of fiscal 2016, fourth quarter of fiscal 2015 and first quarter of fiscal 2015, respectively.

Research, development and engineering (RD&E) expense was \$2.3 million in the first quarter of fiscal 2016 compared to \$3.0 million in the preceding quarter and \$1.8 million in the first quarter of fiscal 2015. The sequential decrease in RD&E expense is primarily due to the deconsolidation of the Company's Kingstone subsidiary slightly offset by a decrease in R&D grants earned. Compared to the same quarter in fiscal 2015, RD&E expense increased due primarily to the inclusion of RD&E expense of BTU and SoLayTec, partially offset by the effect of the deconsolidation of Kingstone.

Depreciation and amortization in the first quarter of fiscal 2016 was \$783,000, compared to \$869,000 in the preceding quarter and \$705,000 in the first quarter of fiscal 2015.

Income tax expense in the first quarter of fiscal 2016 was \$0.3 million compared to \$1.3 million in the preceding quarter. The sequential decrease is due primarily to taxes on the Kingstone gain recognized in the fourth quarter of fiscal 2015. The Company had an income tax expense in the first quarter of fiscal 2015 of \$0.2 million.

Net loss for the first quarter of fiscal 2016 was \$4.0 million, or \$0.31 per share, compared to a net income of \$1.3 million or \$0.10 per share in the preceding quarter and a net loss for the first quarter of fiscal 2015 of \$5.2 million, or \$0.53 per share.

Total unrestricted cash and cash equivalents at December 31, 2015 were \$22.6 million, compared to \$25.9 million at September 30, 2015. The decrease in cash is due primarily to cash used in operations and to fund working capital, partially offset by proceeds in the first quarter of fiscal 2016 from the partial sale of Kingstone.

Outlook

The company expects revenues for the quarter ending March 31, 2016, to be in the range of \$20 to \$22 million. Gross margin for the quarter ending March 31, 2016, is expected to be in the high teens percent range due to expected lower shipment volumes, with negative operating margins. As a result of recent orders received in December and January and anticipated future order activity, the company expects the quarterly revenue run rate to be significantly higher in the second half of fiscal 2016 compared to the first half of fiscal 2016.

Operating results could be impacted by the timing of system shipments, the net impact of revenue deferral on those shipments, and recognition of revenue based on customer acceptances, all of which can have a significant effect on operating results.

A substantial portion of Amtech's revenues are denominated in Euros. The revenue outlook provided in this press release is based on an assumed exchange rate between the United States Dollar and the Euro. A significant decrease in the value of the Euro in relation to the United States Dollar could cause actual revenues to be lower than anticipated.

Conference Call

Amtech Systems will host a conference call and webcast today at 5:00pm ET to discuss first quarter fiscal 2016 financial results. Those in the USA wishing to participate in the live call should dial (877) 317-6789. From Canada, dial (866)-605-3852, and internationally, dial (412) 317-6789. Request "Amtech" when connected to the operator. A replay of the call will be available one hour after the end of the conference call through Feb. 16, 2016. To access the replay please dial US toll free (877) 344-7529 and enter code 10079200. Internationally, dial (412) 317-0088 and use the same code.

A live and archived web cast of the conference call can be accessed in the investor relations section of Amtech's website at www.amtechsystems.com.

About Amtech Systems, Inc.

Amtech Systems, Inc. is a global supplier of advanced thermal processing equipment to the solar, semiconductor / electronics, and LED manufacturing markets. Amtech's equipment includes diffusion, ALD and PECVD systems and solder reflow systems. Amtech also supplies wafer handling automation and polishing equipment and related consumable products. The Company's wafer handling, thermal processing and consumable products currently address the diffusion, oxidation, and deposition steps used in the fabrication of solar cells, LEDs, semiconductors, MEMS, printed circuit boards, semiconductor packaging, and the polishing of newly sliced sapphire and silicon wafers. Amtech's products are recognized under the leading brand names Tempress Systems ™, Bruce Technologies™, PR Hoffman™, R2D Automation™, SoLayTec, and BTU International.

Cautionary Note Regarding Forward-Looking Statements

Certain information contained in this press release is forward-looking in nature. All statements in this press release, or made by management of Amtech Systems, Inc. and its subsidiaries ("Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "intends," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology or our management are intended to identify such forward-looking statements. Examples of forward-looking statements include statements regarding Amtech's future financial results, operating results, business strategies, projected costs, products under development, competitive positions, and plans and objectives of Amtech and its management for future operations. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. The Form 10-K that Amtech filed with the Securities and Exchange Commission (the "SEC") for the year-ended September 30, 2015, listed various important factors that could affect the company's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Risk Factors" in the Form 10-Ks and investors should refer to them. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties. Except as required by law, we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

Contacts:

Amtech Systems, Inc. Bradley C. Anderson Chief Financial Officer (480) 967-5146 irelations@Amtechsystems.com Christensen Investor Relations Patty Bruner (480) 201-6075 pbruner@christensenir.com

Condensed Consolidated Statements of Operations

Unaudited

(in thousands, except per share data)

| | Three Months Ended December 31, | | | |
|--|---------------------------------|---------|----|---------|
| | | 2014 | | |
| Revenues, net of returns and allowances | \$ | 22,074 | \$ | 12,396 |
| Cost of sales | | 16,119 | | 8,968 |
| Gross profit | | 5,955 | | 3,428 |
| Selling, general and administrative | | 7,596 | | 6,384 |
| Research, development and engineering | | 2,288 | | 1,837 |
| Operating loss | | (3,929) | | (4,793) |
| Interest expense and other income, net | | (219) | | 97 |
| Loss before income taxes | | (4,148) | | (4,696) |
| Income tax provision | | 300 | | 180 |
| Net loss | | (4,448) | | (4,876) |
| Add: net loss (income) attributable to noncontrolling interest | | 433 | | (319) |
| Net loss attributable to Amtech Systems, Inc. | \$ | (4,015) | \$ | (5,195) |
| Loss Per Share: | | | | |
| Basic loss per share attributable to Amtech shareholders | \$ | (0.31) | \$ | (0.53) |
| Weighted average shares outstanding | | 13,152 | | 9,854 |
| Diluted loss per share attributable to Amtech shareholders | \$ | (0.31) | \$ | (0.53) |
| Weighted average shares outstanding | | 13,152 | | 9,854 |

Condensed Consolidated Balance Sheets

(in thousands, except share data)

| | De | cember 31, 2015 | 5 | September 30, 2015 |
|--|----------|--------------------|----|-----------------------|
| Assets | J) | Jnaudited) | | |
| Current Assets | _ | | | |
| Cash and cash equivalents | \$ | 22,617 | \$ | 25,852 |
| Restricted cash | | 847 | | 638 |
| Accounts receivable | | | | |
| Trade (less allowance for doubtful accounts of \$3,708 and \$5,009 at December 31, 2015, and September 30, 2015, respectively) | | 16,063 | | 14,488 |
| Unbilled and other | | 7,084 | | 8,494 |
| Inventories | | 21,541 | | 23,329 |
| Deferred income taxes | | 2,050 | | 2,050 |
| Notes and other receivable | | 67 | | 7,079 |
| Other | | 6,117 | | 3,772 |
| Total current assets | | 76,386 | | 85,702 |
| Property, Plant and Equipment - Net | | 17,079 | | 17,761 |
| Deferred Income taxes - Long-Term | | 430 | | 430 |
| Other Assets - Long Term | | 1,145 | | 3,356 |
| Investments | | 2,716 | | 2,733 |
| Intangible Assets - Net | | 4,665 | | 4,939 |
| Goodwill | | 12,074 | | 10,535 |
| Total Assets | \$ | 114,495 | \$ | 125,456 |
| Liabilities and Stockholders' Equity | | | | |
| Current Liabilities | | | | |
| Accounts payable | \$ | 10,582 | \$ | 15,646 |
| Current maturities of long-term debt | | 822 | | 919 |
| Accrued compensation and related taxes | | 5,349 | | 5,605 |
| Accrued warranty expense | | 766 | | 793 |
| Deferred profit | | 4,679 | | 4,873 |
| Customer deposits | | 4,601 | | 7,154 |
| Other accrued liabilities | | 2,725 | | 3,551 |
| Income taxes payable | | 940 | | 830 |
| Total current liabilities | | 30,464 | | 39,371 |
| Long-term Debt | | 9,234 | | 8,448 |
| Income Taxes Payable - Long-Term | | 6,790 | | 4,990 |
| Total liabilities | | 46,488 | | 52,809 |
| Stockholders' Equity | | | | |
| Common stock; \$0.01 par value; 100,000,000 shares authorized; | | 122 | | 121 |
| shares issued and outstanding: 13,164,009 and 13,150,469 at December 31, 2015, and September 30, 2015, respectively | | 110.522 | | 131 |
| Additional paid-in capital Accumulated other comprehensive loss | | 110,533 | | 110,191 |
| Retained deficit | | (9,201) | | (8,666) |
| | | (32,837) | | (28,822) |
| Total stockholders' equity | | 68,627 | | 72,834 |
| Noncontrolling interest | | (620) | | (187) |
| Total equity | • | 68,007 | • | 72,647 |
| Total Liabilities and Stockholders' Equity | <u> </u> | 114,495 | \$ | 125,456 |

AMTECH SYSTEMS, INC. (NASDAQ: ASYS) February 4, 2016

Condensed Consolidated Statements of Cash Flows

Unaudited

(in thousands)

| | Three Months E | Three Months Ended December 31, | | |
|---|----------------|---------------------------------|--|--|
| | 2015 | 2014 | | |
| Operating Activities | | | | |
| Net loss | \$ (4,448) | \$ (4,876) | | |
| Adjustments to reconcile net loss to net cash provided by (used in) operating activities: | | | | |
| Depreciation and amortization | 783 | 705 | | |
| Write-down of inventory | 39 | 35 | | |
| Deferred income taxes | 9 | (4) | | |
| Non-cash share based compensation expense | 342 | 232 | | |
| Provision for (reversal of) allowance for doubtful accounts | (158) | 44 | | |
| Changes in operating assets and liabilities: | | | | |
| Restricted cash | (220) | (244) | | |
| Accounts receivable | (309) | 2,371 | | |
| Inventories | 1,412 | (535) | | |
| Accrued income taxes | 212 | 172 | | |
| Other assets | (167) | (722) | | |
| Accounts payable | (4,861) | (429) | | |
| Accrued liabilities and customer deposits | (3,354) | 6,407 | | |
| Deferred profit | (50) | (1,259) | | |
| Net cash (used in) provided by operating activities | (10,770) | 1,897 | | |
| Investing Activities | | | | |
| Purchases of property, plant and equipment | (108) | (155) | | |
| Acquisitions, net of cash acquired | _ | (253) | | |
| Proceeds from partial sale of subsidiary | 7,012 | _ | | |
| Loss on equity investments | 17 | _ | | |
| Net cash provided by (used in) investing activities | 6,921 | (408) | | |
| Financing Activities | | | | |
| Payments on long-term debt | (180) | _ | | |
| Borrowings on long-term debt | 830 | _ | | |
| Net cash provided by financing activities | 650 | | | |
| Effect of Exchange Rate Changes on Cash | (36) | (302) | | |
| Net Increase (Decrease) in Cash and Cash Equivalents | (3,235) | 1,187 | | |
| Cash and Cash Equivalents, Beginning of Period | 25,852 | 27,367 | | |
| Cash and Cash Equivalents, End of Period | \$ 22,617 | \$ 28,554 | | |